

AMENDMENTS TO THE CLAIMS

Upon filing this divisional application, the present document cancel claims 1, 2, 13-24, 26-28, 32, 33, 40 and 43-45 from the parent application and amends claims 3-5, 12, 25, 29, 34, 35, 37, 39, 41 and 46. According to 37 C.F.R. § 1.121(c), after entry of the present amendment, the status of the claims in the case is as follows:

Claims 1 and 2 presently canceled

3. (Currently Amended) The method of claim 2 5, wherein said immunoconjugate binds to VEGF bound to the VEGF receptor VEGFR1 expressed by endothelial cells of the vasculature of said vascularized tumor.

4. (Currently Amended) The method of claim 2 5, wherein said immunoconjugate binds to VEGF bound within the stroma of said vascularized tumor.

5. (Currently Amended) A method for treating cancer, comprising administering to an animal that has a vascularized solid tumor, a metastatic tumor or metastases from a primary tumor, a therapeutically effective amount of at least:

(a) a first pharmaceutical composition comprising at least a first immunoconjugate that comprises at least a first therapeutic agent cleavage agent or enzyme operatively attached to at least a first anti-VEGF antibody, or antigen-binding fragment thereof, that binds to substantially the same epitope as the monoclonal antibody 2C3 (ATCC PTA 1595), thereby localizing said immunoconjugate to the vasculature or stroma of said vascularized solid tumor; and

(b) subsequently administering to said animal a second composition that comprises at least one substantially inactive prodrug that is cleaved by the cleavage agent or enzyme attached to said antibody in said first pharmaceutical composition, thereby releasing a substantially active drug specifically within the vasculature or stroma of said vascularized solid tumor.

6. (Original) The method of claim 5, wherein said at least a first antibody of said immunoconjugate is a monoclonal antibody or an antigen-binding fragment thereof.
7. (Original) The method of claim 5, wherein said at least a first antibody of said immunoconjugate is an scFv, Fv, Fab', Fab, diabody, linear antibody or F(ab')₂ antigen-binding fragment of an antibody.
8. (Original) The method of claim 5, wherein said at least a first antibody of said immunoconjugate is a human, humanized or part-human antibody or antigen-binding fragment thereof.
9. (Original) The method of claim 5, wherein said at least a first antibody of said immunoconjugate is a chimeric antibody or a recombinant antibody.
10. (Original) The method of claim 5, wherein said at least a first antibody of said immunoconjugate comprises at least a first variable region that includes an amino acid sequence region having the amino acid sequence of SEQ ID NO:7 or SEQ ID NO:9.

11. (Original) The method of claim 5, wherein said at least a first antibody of said immunoconjugate is the monoclonal antibody 2C3 (ATCC PTA 1595).

12. (Currently Amended) The method of claim 5, wherein said immunoconjugate comprises said at least a first antibody operatively attached to two or more therapeutic cleavage agents or enzymes.

Claims 13-24 presently canceled

25. (Currently Amended) The method of claim 5, wherein said immunoconjugate comprises said at least a first antibody operatively attached to said at least a first therapeutic cleavage agent or enzyme as a fusion protein prepared by expressing a recombinant vector that comprises, in the same reading frame, a DNA segment encoding said antibody operatively linked to a DNA segment encoding said therapeutic cleavage agent or enzyme.

Claims 26-28 presently canceled

29. (Currently Amended) The method of claim 5, wherein said ~~at least a~~ first pharmaceutical composition is administered to said animal intravenously.

30. (Original) The method of claim 5, further comprising subjecting said animal to radiotherapy.

31. (Original) The method of claim 5, further comprising administering to said animal a therapeutically effective amount of at least a second anti-cancer agent.

Claims 32 and 33 presently canceled

34. (Currently Amended) The method of claim 31, wherein said at least a second anti-cancer agent is a chemotherapeutic agent, radiotherapeutic agent, anti-angiogenic agent, apoptosis-inducing agent, steroid, antimetabolite, anthracycline, vinca alkaloid, antibiotic, cytokine, alkylating agent, coagulant or anti-tubulin drug or a prodrug or tumor-targeted form thereof.

35. (Currently Amended) The method of claim 34, wherein said at least a second anti-cancer agent is angiopoietin-2, endostatin, angiostatin, vasculostatin, canstatin, maspin, colchicine, taxol, vinblastine, vincristine, vindescine, a combretastatin, or a prodrug or tumor-targeted form thereof.

36. (Original) The method of claim 31, wherein said at least a second anti-cancer agent is a targeting agent-therapeutic agent construct comprising a therapeutic agent operatively linked to at least a first targeting region that binds to an accessible component of a tumor cell or tumor stroma or to a surface-expressed, surface-accessible, surface-localized, cytokine-inducible or coagulant-inducible component of tumor vasculature or intratumoral vasculature.

37. (Currently Amended) The method of claim 36, wherein said at least a first targeting region is operatively linked to a cytotoxic, cytostatic or anticellular agent, anti-angiogenic agent, apoptosis-inducing agent or anti-tubulin drug.

38. (Original) The method of claim 36, wherein said at least a first targeting region is operatively linked to Tissue Factor, truncated Tissue Factor or a Tissue Factor derivative or to an antibody, or antigen-binding fragment thereof, that binds to Tissue Factor, truncated Tissue Factor or a Tissue Factor derivative.

39. (Currently Amended) The method of claim 34 36, wherein said at least a second therapeutic agent is a substantially inactive prodrug that is cleavable to form a substantially active drug first targeting region is operatively linked to a plant-, fungus- or bacteria-derived toxin.

Claim 40 presently canceled

41. (Currently Amended) The method of claim 40 5, wherein said at least a first cleavage agent or enzyme and said at least one substantially inactive prodrug are operably matched agents selected from the groups consisting of:

- (a) alkaline phosphatase, arylsulfatase, serratia protease, thermolysin, subtilisin, a carboxypeptidase, a cathepsin, D-alanylcarboxypeptidase, β -galactosidase, neuraminidase, β -lactamase, penicillin amidase and cytosine deaminase; and
- (b) a phosphate-containing prodrug, sulfate-containing prodrug, peptide-based prodrug, D-amino acid-modified prodrug, glycosylated prodrug, β -lactam-containing prodrug, optionally substituted phenoxyacetamide- or phenylacetamide-containing prodrug and 5-fluorocytosine.

42. (Original) The method of claim 5, wherein said animal is a human patient.

Claims 43-45 presently canceled

46. (Currently Amended) A method for treating cancer, comprising administering to an animal that has a vascularized solid tumor:

- (a) a first composition comprising at least a first immunoconjugate that comprises at least a first cleavage agent or enzyme operatively attached to at least a first anti-VEGF antibody, or antigen-binding fragment thereof, that ~~binds to substantially the same epitope as the monoclonal antibody 2C3 (ATCC PTA 1595)~~ effectively competes with the monoclonal antibody 2C3 (ATCC PTA 1595) for binding to VEGF, thereby localizing said immunoconjugate to the vasculature or stroma of said vascularized solid tumor; and
- (b) subsequently administering to said animal a second composition that comprises at least one substantially inactive prodrug that is cleaved by the cleavage agent or enzyme attached to said antibody in said first composition, thereby releasing a substantially active drug specifically within the vasculature or stroma of said vascularized solid tumor.